

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Tabata et al.

Serial No.: 08/765,046

Filed: November 19, 1996

Notice of Allow. Date: NA

Due Date:

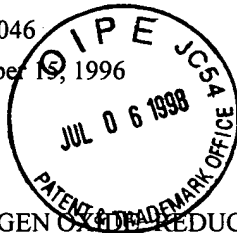
Title: NITROGEN OXIDE REDUCING CATALYST AND PROCESS FOR REDUCING NITROGEN OXIDES IN EXHAUST GAS

Examiner: T. Vanoy

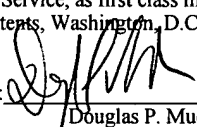
Group Art Unit: 1754

Docket: 8279.146USWO

Batch No.: NA



CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described hereinabove, are being deposited in the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on June 30, 1998.

By: 
Douglas P. Mueller

Assistant Commissioner for Patents
Washington, D.C. 20231

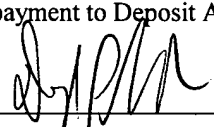
Sir:

We are transmitting herewith the attached:

- ☒ Transmittal Sheet in duplicate containing Certificate of Mailing
- ☒ Check(s) in the amount of \$240.00, for Information Disclosure Statement
- ☒ Other: Supplemental Information Disclosure Statement; Form PTO 1449; 4 cited references
- ☒ Return postcard

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers, if appropriate. Please charge any additional fees or credit overpayment to Deposit Account No. 13-2725. A duplicate of this sheet is enclosed.

MERCHANT, GOULD, SMITH, EDELL,
WELTER & SCHMIDT
3100 Norwest Center, Minneapolis, MN 55402
(612) 332-5300

By: 
Name: Douglas P. Mueller
Reg. No.: 30,300
DPM:vvh

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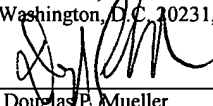
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Tabata et al.
Serial No.: 08/765,046
Filed: November 15, 1996
Title: NITROGEN OXIDE-REDUCING CATALYST AND PROCESS FOR REDUCING NITROGEN OXIDES IN EXHAUST GAS

Examiner: T. Vanoy
Group Art Unit: 1754
Docket No.: 8279.146USWO

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By: 
Douglas P. Mueller

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (37 C.F.R. §1.97(b))

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

With regard to the above-identified application, the items of information listed on the enclosed Form 1449 are brought to the attention of the Examiner.

This statement should be considered because it is submitted before the mailing date of a first Office Action on-the-merits. Accordingly, no fee is due for consideration of the items listed on the enclosed Form 1449.

In accordance with 37 C.F.R. §1.98(a)(2), a copy of each document or other information listed on the enclosed Form 1449 is provided.

A concise explanation of the relevance of each non-English language document or other information is as follows (37 C.F.R. §1.98(a)(3)):

Japanese Patent Application No. 63-283727 discloses a process for reduction of NO_x in the presence of hydrocarbons under the circumstances of oxidation, and catalysts therefor. The catalysts contain transition metals belonging 4th periodic group, such as Cu, V, Cr, Mn, Fe, Co, Ni and the like loaded on a hydrophobic zeolite. But this neither discloses nor suggests the cobalt-loaded zeolite that does not show a Raman spectral band assignable to cobalt oxide as the catalyst, which is a specific feature of the present invention. The NO_x removability is greatly improved by the use of a catalyst containing cobalt oxide in such a specific condition.

Japanese Patent Application No 5-220403 discloses a catalyst for cleaning exhaust gas, which contains at least one kind of metal selected from the group

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consisting of Cu, Co, Ni, Fe, Pt and Pd loaded on zeolite β . Only Cu is used in the examples. The specific effect obtained by the use of cobalt oxide specified in the present invention is not suggested.

67th CATSJ Meeting Abstract discloses a catalyst for reducing NO_x in the presence of hydrocarbons under the circumstances of oxidation. The results obtained from Co-ZSM-5 are reported.

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C. §§ 102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to establish that the reference(s) are not "prior art." Moreover, Applicants do not represent that a reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.

Consideration of the items listed is respectfully requested. Pursuant to the provisions of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked as being considered and initialled by the Examiner, to the undersigned with the next official communication.

Please charge any additional fees or credit any overpayment to Deposit Account No. 13-2725.

Respectfully submitted,

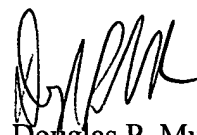
Ohtsuka et al.

By their Attorneys,

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Dated: June 30, 1998

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